

CITY OF CANTERBURY.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1907.

MR. MAYOR, ALDERMEN, AND COUNCILLORS,—

I have the honour of presenting to you my Thirty-first Annual Report of the Health and Sanitary Condition of the Borough for the past year.

Births.—The number of births registered in the Borough during the year 1907 was 553 (277 males and 276 females), making a birth-rate of 21·1 per 1,000. The birth-rate for England and Wales in 1907 was 26·3 per 1,000. There was a decrease of 69 births on 1906, an increase of 2 on 1905, and a decrease of 19 on 1904.

Deaths.—The number of deaths registered was 388 (204 males and 184 females), a decrease of 3 deaths over 1906, of 19 over 1905, and of 27 over 1907. The excess of births over deaths was 165; 72 of these deaths occurred in the Kent and Canterbury Hospital, inclusive of 42 cases brought from the country districts with their fatal diseases upon them.

56 of which were under 1 year of age;
40 of 1 year of age and under 5;
11 of 5 years of age and under 15;
20 of 15 years of age and under 25;
129 of 25 years of age and under 65; and
130 of 65 years of age and upwards; making a total of 388.

Death Rate.—The annual death-rate of the estimated population to the middle of 1907, viz., 23,200 was 14·8, including the 42 cases brought from the country districts into the Kent and Canterbury Hospital with their fatal disease upon them, and, excluding these cases, the actual death-rate for the City was 13·2 per 1,000. This is lower than last year, and again becomes a record low death-rate for Canterbury. The death-rate for England and Wales in 1907 was 15 per 1,000.

Vital Statistics of Whole District during 1907 and previous Years.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.				TOTAL DEATHS IN PUBLIC INSTITU- TIONS IN THE DISTRICT.	Deaths of Non- residents registered in Public Institu- tions in the District.	Deaths of Residents registered in Public Institu- tions beyond the District.	NETT DEATHS AT ALL AGES BELONGING TO THE DISTRICT.	
		Number	Rate*	Under 1 Year of Age.		At all Ages.					Number.	Rate.*
				Number.	Rate per 1000 Births registered.	Number.	Rate.*					
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1897	23026	621	26·9	103	164	430	18·6	59	36		394	17·1
1898	23026	613	27	103	167	441	19·1	44	32		409	17·7
1899	23026	614	27·1	76	123	448	19·4	50	30		418	18·1
1900	23026	602	26·1	67	113	428	18·5	59	28		400	17·3
1901	24899	593	23·8	80	134	413	16·5	66	34		381	15·3
1902	24899	548	22·8	59	107	378	15·1	47	29		331	14·01
1903	24899	621	24·9	91	146	420	17	56	37		387	15·5
1904	24899	572	22·9	104	181	406	16·3	37	21		385	15·4
1905	24899	557	22·1	68	81	383	15·3	52	31		352	14·1
1906	25990	622	23·9	81	76	391	13·9	48	28		363	13·9
Averages for years 1897-1906.	23558	595	23·5	83	129	413	16·3	57	30		382	15·3
1907	26208	553	21·1	55	99	388	14·8	72	42		346	13·2

* Rates in Columns 4, 8, and 13 calculated per 1,000 of the estimated population.

NOTE.—The deaths to be included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term “Non-residents” is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term “Residents” is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The “Public institutions” to be taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses and lunatic asylums.

Area of District in acres }
(exclusive of area } 3,955
covered by water) }

Total population at all ages, 24,899
Number of inhabited houses, 5,460
Average number of persons per house, 4·4 } At Census of 1901.

The following table gives the details of the mortality :—

Mortality in the Borough of Canterbury during 1907.

CAUSES OF DEATH.	DEATHS IN OR BELONGING TO WHOLE DISTRICT AT SUBJOINED AGES.							TOTAL DEATHS IN PUBLIC INSTITU- TIONS IN THE DISTRICT.
	All ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and up- wards.	
Small-pox ... ..	...	...	...	...	...	...	...	...
Measles	16	2	14	...	...	...	...	...
Scarlet fever	1	...	...	1	...	...	...	...
Whooping-cough	3	2	1	...	...	...	...	...
Diphtheria (including membranous croup).	3	...	2	1	...	...	...	...
Croup ... ..	...	...	...	...	...	...	...	...
Fever { Typhus ... ..	...	...	...	...	...	...	...	...
{ Enteric	3	...	...	...	2	1	...	2
{ Other continued ... ..	...	...	...	...	...	...	...	...
Epidemic influenza	8	1	...	...	...	4	3	...
Cholera ... ..	...	...	...	...	...	...	...	...
Plague ... ..	...	...	...	...	...	...	...	...
Diarrhoea	5	5	...	...	...	...	...	...
Enteritis	2	...	1	...	...	...	1	...
Puerperal fever	1	...	...	...	...	1	...	1
Erysipelas ... ..	...	...	...	...	...	...	...	...
Other septic diseases	2	1	...	...	...	1	...	...
Phthisis (Pulmonary Tuberculosis)	37	2	1	1	8	19	1	7
Other tubercular diseases	18	9	5	2	...	1	1	1
Cancer, malignant disease	40	...	...	...	...	18	16	12
Bronchitis	20	2	3	...	...	3	10	2
Pneumonia	15	3	6	1	...	2	1	1
Pleurisy	2	1	...	...	...	1	...	1
Other diseases of Respiratory organs	2	...	...	...	1	...	1	2
Alcoholism ... ..	...	...	...	...	...	...	...	...
Cirrhosis of liver }	3	...	...	...	...	2	...	1
Venereal diseases	2	1	...	...	...	1	...	...
Premature birth	10	10	...	...	...	...	...	...
Diseases and accidents of parturition	3	...	...	...	1	2	...	...
Heart disease	26	...	1	1	...	7	15	3
Accidents	17	2	...	1	2	6	4	5
Suicides	2	...	...	...	...	1	1	...
Senile decay	35	...	...	...	...	...	35	...
All other causes	112	...	...	...	...	...	...	34
All causes	388	56	40	8	19	98	125	72

Influenza was prevalent during the first three months of the year and caused 8 deaths.

Diarrhoea caused 4 deaths under 1 year of age, 2 of these cases were imported from Folkestone and died in the Fair.

Enteritis caused 3 deaths, this is a decrease of 3 deaths over 1906.

Phthisis caused 37 deaths, 9 more than last year, but 5 of these cases were imported.

From other **Tubercular Diseases** 18 deaths were registered, two less than last year.

Cancer, Malignant Disease, caused 40 deaths, 9 more than last year, but 6 of these cases were imported.

Bronchitis caused 20 deaths, 10 less than last year, 2 cases imported.

Pneumonia caused 15 deaths, 6 more than last year, 2 cases imported.

Pleurisy caused 2 deaths, one more than last year.

Other Diseases of Respiratory Organs caused 2 deaths, 1 more than last year.

Alcoholism and Cirrhosis of Liver caused 3 deaths, 1 of these imported, 5 less than last year.

Venereal Diseases caused 2 deaths, 4 less than last year.

Premature Births caused 10 deaths, 8 less than last year.

Diseases and Accidents of Parturition caused 3 deaths, one more than last year.

Heart Disease caused 26 deaths, 2 of these imported, 6 less than last year.

Accidents caused 17 deaths, 2 of these imported, 2 more than last year.

Senility caused 35 deaths : 17 between 80 and 90 years of age, 17 between 70 and 80, and 1 between 60 and 70 years of age.

Suicides caused 2 deaths, one more than last year.

From all other causes, 112.

Midwives' Act.—I have made two half-yearly inspections of the Midwives, their homes, bags and case books, and have supplied them with thermometers and instructed them with taking of temperature and pulse in lying-in cases.

Infantile Death Rate.—The number of deaths registered under 1 year of age was 56, a decrease of 25 over last year, of 12 over 1905, and of 2 over 1904. The infantile mortality measured by the number of deaths under 1 year to 1,000 births registered would be 98·7. For England and Wales it was 118 under 1 year to 1,000 births registered, so our infantile death rate was considerably below the average. The birth rate, too, was 2·4 below the average. The proportion of deaths for tubercular disease under 1 year of age is decreasing, 11 last year and 16 in 1906, a decrease of 5. The milk supply requires continual supervision, as a large proportion is brought from the country dairies and cowsheds, over which we have no control. The Veterinary Surgeon should make two inspections each year of the udders of the cows to see if they are affected with tuberculosis, and if so to prevent them being milked. A certificate should be produced twice a year from a qualified Veterinary Surgeon that the udders of the cows in the country dairies supplying milk to the City are healthy and free from tuberculosis.

Infantile Mortality during the Year 1907.

DEATHS FROM STATED CAUSES IN WEEKS AND MONTHS UNDER ONE YEAR OF AGE.

CAUSE OF DEATH.				Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under One Year.
ALL CASES.	Certificated	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Uncertificated	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	3
Common Infectious Diseases.	Small-Pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chicken-Pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
	Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Diphtheria (including Membranous Croup)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoeal Diseases.	Influenza	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
	Whooping Cough	...	...	...	...	1	1	1	...	...	...	1	...	...	...	...	...	...	...	2
	Diarrhoea, all forms	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	2	...	...	5
	Enteritis, Muco-enteritis, Gastro-enteritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Gastritis, Gastro-intestinal Catarrh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wasting Diseases.	Premature Birth	...	...	8	1	1	...	10	...	...	...	...	...	...	...	...	...	...	...	10
	Congenital Defects	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
	Injury at Birth	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Diseases.	Want of Breast-milk, Starvation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Atrophy, Debility, Marasmus	...	...	3	...	...	...	3	2	...	...	...	...	...	...	...	...	...	...	5
	Tuberculous Meningitis	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	2
	Tuberculous Peritonitis : Tabes Mesenterica	...	...	...	...	...	...	...	2	...	...	1	...	...	3	...	...	1	1	8
	Other Tuberculous Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
Other Causes	Erysipelas	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
	Syphilis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
	Rickets	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
	Meningitis (not Tuberculous)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
	Convulsions	...	...	2	1	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...
	Bronchitis	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	3
	Laryngitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pneumonia	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...	...	...	...	3
	Suffocation, overlaying	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Other Causes				1	...	...	2	3	...	...	...	2	...	1	1	...	...	...	...	7
				17	2	1	3	23	6	2	1	4	3	2	5	1	1	5	3	56

Births in the Year : Legitimate, 533 ; illegitimate, 20.

Deaths from all causes at all ages, 388.

Cases of Infectious Disease notified during the year 1907.

NOTIFIABLE DISEASE.				All at Ages.	CASES NOTIFIED IN WHOLE DISTRICT.					
					Under 1.	1 to 5.	5 to 15	15 to 25.	25 to 65.	65 and upwards.
Small-pox	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...
Diphtheria, including membranous croup	...	...	...	51	...	14	29	5	3	...
Erysipelas	...	...	...	16	...	...	2	1	7	6
Scarlet fever	...	...	...	58	...	12	38	7	1	...
Typhus fever	...	...	...	...	...	...	...	...	...	...
Enteric fever	...	...	...	10	...	...	3	3	4	...
Relapsing fever	...	...	...	...	...	...	...	...	...	...
Continued fever	...	...	...	...	...	...	...	...	...	...
Puerperal fever	...	...	...	1	...	...	...	...	1	...
Plague	...	...	...	...	...	...	...	...	...	...
Totals	...	...	...	136	...	26	72	16	16	6

Infectious Diseases.—The number of cases notified during the year 1907 of infectious diseases were 136, 9 more than last year, viz.: scarlet fever 58, diphtheria 51, enteric fever 10, erysipelas 16, and puerperal fever 1. The number of deaths notified for the seven principal zymotic diseases were 28, viz.: measles 16, scarlet fever 1, diphtheria 3, enteric fever 3, diarrhoea 5 (2 of which were imported with their fatal disease upon them), and whooping cough 3. Deducting the 2 imported deaths from diarrhoea, the zymotic death rate for 1907 was 1·0 per 1,000. For England and Wales the death rate for the seven chief epidemic diseases was 1·26.

Enteric Fever.—10 cases of this disease were reported ; 4 of them were treated at the Sanatorium, two at the Kent and Canterbury Hospital, and 4 at home. 3 were imported ; 1 being a visitor from Philadelphia who was unwell on the voyage, 1 from Dudley, and the other from Whitstable, both inmates of the Hospital. In three cases there were no sanitary defects, and the cause was difficult to trace, the patients having been away from home. Drinking polluted water was assigned to one case, another was that of a bricklayer who inhaled sewer gas whilst altering drains, another was a mild case and there was a slight defect in the drains, and the other was a doubtful case. It having been usual to have cases of typhoid amongst the Canterbury children after attending the school treats at Whitstable, caused by eating stale shell fish—cockles and mussels—picked up from the beach, the attention of the school Managers was called to this dangerous practice. They kindly co-operated, and besides advising the children in their respective schools, printed a caution on the tickets of invitation. These steps were very successful, as during the year there was no case attributable to this cause. Last year there were five.

Scarlet Fever.—There were 58 cases. Treated at Sanatorium, 52 ; Military Hospital, 2 ; at home, 4. Of these 21 occurred in the Dane John Ward, 19 in the Westgate Ward, and Northgate Ward 18, including 7 from the Barracks, 3 from the Kent and Canterbury Hospital, and a nurse at the Sanatorium. 5 houses (including the Hospital) had 3 cases each, 6 2 cases each, and 31 single cases. The source of infection was traced in 25 instances, 24 not traced, 5 were imported (Edinburgh, London, Wingham, Blean, and Ashford), infecting 7 other persons, and an outbreak at the Kent and Canterbury Hospital accounted for 5 cases. A strong letter of caution was sent to a parent who had failed to notify.

Diphtheria.—There were 51 cases notified, 23 from the Dane John Ward, 16 from the Northgate Ward, and 12 the Westgate Ward. 40 of these cases were removed to the Sanatorium, and 11 treated at home. The principal sources of infection appeared to be St. Paul's Schools, 9, and St. Dunstan's Schools, 7, whilst 3 cases came from one hop garden, and 2 from another, the former probably being polluted water. Four were due to remaining near stopped drains whilst being cleared, and one inhaling bad smells from sewage. Another from drinking polluted water. 8 were due to infection, including a nurse at the Sanatorium. In 5 cases sanitary defects were found, 11 the cause not traced, and 1 was imported. Among the parents of the patients were a tailor, schoolmaster, baker, cowman, laundryman, and a milkman. Necessary precautions were taken to prevent the spread of infection, in some instances the men were not allowed to follow their employment for a certain period. An outbreak in schools is often preceded by cases of sore throat, not obviously of a diphtheriatic nature. Any child away from school suffering with sore throat, the Head Master or Mistress should notify to the Medical Officer of Health, who will take immediate steps to see if it is infectious. This disease is often conveyed from child to child by school appliances used first by one and then by another, such as slates (cleaned with spittle), penholders and pencils (which are apt to be sucked and chewed), and drinking vessels used in common. Steps should be taken to avoid such danger.

Erysipelas notifications numbered 16, principally facial, and 2 of them arising from wounds in the leg.

Puerperal Fever.—Only 1 case reported.

Sanatorium.—The number of cases admitted into the Sanatorium during the year 1907 was 96 (six more than last year), viz. : 50 cases of scarlet fever, with one death ; diphtheria 41, with only 2 deaths, enteric fever 4 cases ; and measles 1. The Sanatorium was opened on the 29th of November, 1897, and on the 31st of January, 1907, 1,000 cases had been admitted, viz. : 753 cases of scarlet fever, with 9 deaths ; 21 cases of small-pox, with 2 deaths ; 57 cases of typhoid fever, with 5 deaths ; 164 cases of diphtheria, with 14 deaths ; and 5 cases of measles. There were 30 deaths in all, giving a mortality of 3·3 per 1,000.

Cottage Property.—For many years there has been a difficulty in effectually dealing with the poorer class of house property in Canterbury. Much of it is old, and therefore easily becomes dilapidated. The rents, however, are cheap. If condemned there was no place for the poor to go to. At the present time, through unemployment, the demand for cottages is not so great as hitherto, so that there is a better opportunity to deal with the question than there has been hitherto. If the Government's promised legislation is passed giving Local Authorities power to borrow money at a low rate of interest to build suitable dwellings for the labouring classes much of the undesirable property in the City could be dealt with.

Eleven Schools have been closed for short periods owing to outbreaks of infectious diseases, principally measles, whooping cough, and mumps.

Bakehouses.—I have made two inspections during the year and with one or two exceptions found them satisfactory.

Dairies, Cowsheds, and Milkshops.—I have inspected these, and, where necessary, have given instruction as to drainage, cleaning, and ventilation. The new bye-law affecting these are now in full force, and in nearly all cases provision has been made for 800 cubic feet space for each cow.

Factories' and Workshops' Acts.—Extra attention has been given to the carrying out of these Acts, with the result of a marked improvement in the sanitary condition of the premises under inspection. The number of Workshops, etc., on register is 292, made up as follows :—Factories, 35 ; Workshops (including 52 Bake Houses, three of them underground), 202 ; and Work places, 55. List of outworkers received half-yearly from employers, 19 ; the number of hands working at home being 73 ; 68 of them in the tailoring trade, four sack makers, and 1 upholsteress. There are therefore 365 places under inspection, and these have been all visited by myself and the Sanitary Inspector, and with respect to Bake Houses twice during the year. Fifty-four sanitary defects were pointed out. Three persons connected with laundries, two with bake houses, and one tailoring were prevented from carrying on their avocations owing to infectious diseases in their homes.

Sale of Food and Drugs Act.—Mr. Sidney Harvey, the City Analyst, has kindly furnished me with his Annual Report. 188 analyses executed in 1907. Under the Food and Drugs Act 107 samples were taken, as follows : Arrowroot 3, Bread 3, Baking Powder 7, Butter 20, Cream of Tartar 1, Coffee 4, Camphorated Oil 3, Flour 3, Milk 48, Mustard 2, Pepper 2, Spirits of Nitre 4, Tartaric Acid 3, and Vinegar 3, Whiskey 1. Three samples were returned as adulterated, viz. : 1 sample of Milk was deficient in fat, 1 sample of Sweet Spirits of Nitre was deficient in Ethyl Nitrite, and 1 sample of Tartaric Acid was impregnated with a prohibited amount of Lead. The remaining 104 samples passed as genuine. **For the Local Board.**—Fifty five samples, as follows : Water 28, Sewage Effluents and Surface Waters 26, Disinfectant Powder 1. Of the Waters, 12 samples were from the Public Supply, and were, as usual, very pure organically and free from sewage percolation. Eight samples were polluted more or less, 1 of them slightly, and a sample of this was recommended to be taken again after a short interval. 8 samples passed as being free from contamination. The sample of Disinfectant Powder was of good quality and above the specified strength. **Under the Fertilizers and Feeding Stuffs Act of 1906.**—27 samples, as follows : Fertilizers 23, Feeding Stuffs 4.

Drainage.—The City Surveyor (Mr. A. C. Turley) has kindly forwarded me the following report, viz. :—The following new Surface-Water Drains and Foul Sewers were laid during the past year, viz. :—

294 yards of 9in.	Foul Sewer in Old Dover Road.
300 „ 12in.	„ Northgate Street (re-laying).
120 „ 6in.	Surface-Water Drain in St. Stephen's Road.
65 „ 6in.	„ Zealand Terrace.

Water Supply.—The number of houses connected with the Company's Main during the past year was 38. The analyses made of the water shews it to be, as usual, pure and continuous.

I am, Mr. Mayor and Gentlemen,

Your obedient servant,

FRANK WACHER,

Medical Officer of Health.

Monastery House, Canterbury,
March 6th, 1908.